# Class 04

Time-Varying Statistics
- Definition
- Example

Little's Formula

# Tally vs Time-Varying Statistics

Tally

- Data are discrete observations
  - $X_1, ..., X_n$
- Mean:
  - (from Adobe??)

# Time-Varying

- Data are sample paths (state trajectories)

- To collect time-varying means "on the fly," to maintain a set of counters

  (Insert Eg's?) – although they are in full in the notes?

# Little's Formula

- Average number in "system"

  = average arrival note * average time in system

  - exactly, when "system" is empty
  - approximately, as time progresses towards infinity

Discrete Event Simulat
ion Modeling